## MITIGATED DETERMINATION OF NONSIGNIFICANCE

Surface Mine Reclamation Permit #70-012684, Homestead Valley Mine

**Description of proposal:** The entire Homestead Valley Mine site is to be reclaimed. Twenty one (21)-acres of surface mine disturbance is to be reclaimed at the Homestead Valley site between the elevations of 1650' and 1290' feet (relative to mean sea level). A general description of this reclamation plan proposal is attached to this MDNS. Also see the attached reclamation site proposal map.

**Proponent:** Fiorito Brothers Inc.

C/O Randy Fiorito 1100 NW Leary Way Seattle, WA 98107

### Location of proposal, including street address, if any:

The site is located in the SE¼ of the NE¼ in Section 29, Township 23 North, Range 9 East W.M. King County.

Lead agency: Department of Natural Resources

The lead agency for this proposal has determined acceptable mitigation measures implemented into a reclamation plan; and that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

#### **General Mitigation Description:**

This modified reclamation permit proposal is required to clearly demonstrate how the Homestead Valley mine shall be reclaimed to the standards of RCW 78.44. Furthermore, the reclamation plan shall incorporate best management practices such that mined slopes are stabilized and are reclaimed to 2H: 1V to 3H: 1V gradients. Storm water runoff and ground water seepage is to be controlled such that slope stability is maintained and that topsoil is effectively conserved. Topsoil will be redistributed such that forestry revegetation is self-sustaining. See the attached topographic map and SEPA checklist for the proposed surface mine reclamation site.

## **Description of Site Specific Mitigation:**

Mitigation measures necessary for acceptable reclamation of the Homestead Valley Mine site (SMR Permit 70-012684) include, but may not be limited to, the following items:

## **Surface Mine Reclamation Standards**

The Homestead Valley mine site shall be reclaimed to the standards of RCW 78.44.

### **Maintenance Free Reclamation**

The reclamation plan must establish reclaimed slopes, erosion control devices, re-soiling, and forest revegetation measures that are generally maintenance free after the reclamation work is completed.

### **Slope Reclamation**

- Slopes shall be reclaimed to a 2H: 1V (or more gentle) gradient, and slopes will be constructed for stability commensurate with the most conservative factors of safety as cited in Geotechnical Report (G-1519) and Addendum for reclamation of the Homestead Valley Pit (Geo Group Northwest, Inc).
- Reclamation shall effectively direct storm water and ground water seepage away from any potentially unstable slopes or known landslide areas.
- All reclamation fill materials shall include only natural soil material, clay, silt, sand, gravel and rock. Contaminated material, concrete, asphalt, wood waste, construction or demolition debris are prohibited from importation to the site for use in reclamation.
- Slope reclamation shall be conducted by a timely schedule for backfill compaction testing and geotechnical monitoring. This schedule shall establish that <u>backfill testing</u> and geotechnical monitoring will commence this summer (2004).

#### Water Control Measures

All water control devices shall be constructed for stability commensurate with the <u>most</u> <u>conservative factors of safety</u> cited in Geo Group Northwest, Inc.'s Geotechnical Report (G-1519) and Addendum.

# □ Effective Drainage of Groundwater Through Slope Fill

As part of the construction of cut and fill slopes, groundwater seepage along mined slopes shall be effectively drained through permeable gravel layers (comprising a French drain system) and directed to conveyance ditches, so as to maintain slope stability and erosion control.

# Surface Water Diversion and Conveyance Ditches

All surface water diversion and conveyance ditches and retention ponds shall be designed to sustain surface water and ground water discharge resulting from a 100-year storm event. Note that protections for a 100-year storm event might be important from an environmental protection standpoint due to the proximity of the Snoqualmie River, the grade of slopes, and other factors.

Pipes or culverts shall not be used in the design of water conveyance ditches and retention ponds. Water conveyance shall be accomplished with minimal maintenance open ditches. Conveyance ditches shall be graded, lined (i.e., rip rap and filter fabric),

and constructed with energy dissipation devices (check dams), to effectively resist erosion that would result from a 100-year storm event. The plan currently includes buried pipes or culverts as part of its water conveyance design. Closed water transmission systems shall not be included in the final design of the reclamation plan.

 Boulder Filled Gullies on the Mine's Centrally Located, Highest, East-West Trending Slope

# Mitigation Measures for Erosion Control and Slope Stability

The permit holder shall divert mid-slope ground water seepage to the west, via rip rapped and geo-fabric lined conveyance ditches, to minimize the amount of water flowing to boulder filled gullies and to the landslide area located immediately south and down slope from the lower pit floor.

The reclamation plan must explain how any ground water seepage and/or storm water runoff shall be controlled along large boulder filled gullies, so as to prevent "piping" at the base of the gully channels.

The slopes, conveyance ditches, and retention ponds immediately down gradient of boulder filled gullies shall also be reclaimed to stability commensurate with the most conservative factors of safety cited in the Geotechnical Report G-1519 and Addendum for the Homestead Valley Pit.

## Slope Breaks

Reclamation work at Homestead Valley must effectively protect topsoil from erosion, especially on extensive slopes. Mitigation measures shall, therefore, implement water flow energy dissipation strategies on slopes, including slope terracing, to effectively reduce slope lengths and prevent topsoil erosion.

# Re-establishment of Topsoil

The reclamation plan must include an acceptable topsoil plan, illustrating the placement and incorporation of topsoil necessary for long-term self-sustained forest revegetation.

Re-soiling shall be achieved commensurate with forestry subsequent use and the standards of RCW 78.44. Topsoil should be replaced to a minimum depth of 0.5-feet on the slopes and reclamation floors subsequent to ripping over-compacted native fill material.

### Re-vegetation

Forest re-vegetation shall be initiated immediately after completion of topsoil spreading and grading. Re-vegetation must consist of self-sustaining native species. Noxious weeds shall not be considered acceptable vegetation. Nitrogen fixing native species should also be incorporated into a forest revegetation plan to build topsoil strength and fertility i.e., red alder, lupine, clover etc.

[X] This MDNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from August 30, 2004.

Comments must be submitted by: September 13, 2004

Responsible official: Ron Teissere

Position/title Division Manager

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Signature

There is no agency SEPA appeal.